REMARKS/ARGUMENTS

Claims 1, 3-9, 15 and 17-22 are pending in this application. By this Amendment, the specification and claims 1-8, 15 and 17-19 are amended, claims 2, 10-14 and 16 are canceled without prejudice or disclaimer and claims 20-22 are added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

A. The Office Action objects to claims 8, 15 and 18 for informalities. Applicant respectfully submits that the above amendments obviate the grounds for the objection. Withdrawal of the objection of claims 8, 15 and 18 is respectfully requested.

B. The Office Action rejects claims 1-19 under 35 U.S.C. §112, first paragraph for failing to comply with the enablement requirement with respect to: (1) the means by which the invention "determines if the task is not being performed in the designated region," and (2) a method/apparatus for "generating an interrupt signal when the task is performed in a region other than the designated region." The rejections are respectfully traversed.

With respect to enablement, Applicant respectfully submits that the disclosure as filed including the specification, Figures and claims may be used for enablement.

1) Applicant respectfully submits that for embodiments of the invention, application programs (e.g., tasks) have to be programmed to be performed only in a

corresponding pre-allocated area. CPUs using OSs (operating systems) can operate application programs in an operation region according to a designated procedure. In other words, for embodiments of the invention each application program is given a prescribed region (e.g., in memory) assigned in advance for the application program to be activated in the designated region only. See paragraph 22 of the present specification.

Further, in one embodiment of the invention an address signal can be generated that indicates which application program or programs are operating outside the designated or prescribed region assigned for that application program. A TTU (task testing unit) 40 or a separate device can check and output an address signal. See paragraph 25 of the present specification. For example, if 10 tasks have been designated regions in the operating, an address signal (e.g., having 10 values or 10 binary bits) could be generated indicating the application programs, if any, operating outside its prescribed region.

2) With respect to the interrupt signal, it is generated based on the grant signal. As shown in Figure 5, the grant signal is output based on the address signal (input into an OR-NOT logic gate), the task signal, and the write signal WR. The address signal is discussed in section B1 above. The write signal is described at least in paragraph 26. The task signal is shown in Figures 3- 4. In particular, Figure 4 shows a system with a plurality of possible application programs (e.g., 16) that can be processed and a task signal (e.g.,

Task 0 , ..., 15) output from decoding unit 46. Task signal N in Figure 5 can be correlated to one of individual task signals shown in Figure 4 or the full task signal shown in Figure 3 output by the decoding unit 46. Thus, Applicant respectfully submits that the interrupt signal is enabled by the application as filed.

Applicant respectfully submits the address signal is not output by decoding unit 46 and therefore Figures 3 and 4 illustrate a task signal. The address signal can be input to the TTU 40 (e.g., task comparing unit 1 ... N) in addition to the task signal. See paragraph 26 and Figure 5 of the present specification.

As shown in Figures 3-4, the CPU can output a task ID enable signal. At this time the TTU 40 (e.g., latching unit 44) can read an application program (or task) ID from the data bus (e.g., bits D28-D31) that can identify the enabled application program (e.g., 0011 or application program 3).

With respect to Figure 5, "task N" can be shown as a single bit, however, if a plurality of units 48a, ..., 48n were shown, the task signal could be shown as a plurality of bits. Further, Applicant respectfully submits that the grant signal could be considered as a plurality of grant unit signals (e.g., Figure 5) output by the task comparing unit (e.g., 48a, ..., 48n) individually or a single combined grant signal (e.g., Figure 4) output by the task testing unit 40.

For at least the reasons set forth above, Applicant respectfully submits that a method/apparatus that (1) "determines if the task is not being performed in the designated region" and (2) generates "an interrupt signal when the task is performed in a region other than the designated region" are enabled by the present specification. Withdrawal of the rejection of claims 1-19 under 35 U.S.C. §112, first paragraph is respectfully requested.

3) Examination of claims 8-9 and 18-19 is respectfully requested.

C. The Office Action rejects claims 1-7 and 10-17 under 35 U.S.C. §102(b) over U.S. Patent No. 5,113,521 to McKeen et al. (hereafter "McKeen"). The rejection is respectfully traversed.

With respect to claim 1, Applicant respectfully submits that McKeen fails to disclose claimed features as required under §102. For example, McKeen fails to disclose at least features of allocating prescribed regions of a system memory for each of a plurality of application programs, checking whether the application is performed in a designated region and generating an interrupt signal when the application is performed in a region other than the designated region and combinations thereof as recited in claim 1.

In contrast, McKeen discloses processes for scaler and vector instructions. Applicant respectfully submits that McKeen discloses method and apparatus for executing instructions and in particular resetting faults of vector instructions causing memory

management exceptions. Thus, Applicant respectfully submits that McKeen does not disclose at least a plurality of application programs and allocating prescribed regions of a system memory for each of the plurality of application programs and combinations thereof as recited in claim 1. Further, Applicant respectfully submits that McKeen does not teach or suggest any modification to its disclosure that would result in at least features of a method for debugging application programs including allocating prescribed regions of a system memory for each of a plurality of application programs and combinations thereof as recited in claim 1.

For at least the reasons set forth above, Applicant respectfully submits claim 1 defines patentable subject matter. Claim 15 defines patentable subject matter for at least reasons similar to claim 1. Claims 3-7 and 11-14 and 17 depend from claims 1 and 15, respectively, and therefore also define patentable subject matter for at least that reason as well as their additionally recited features. Claims 2, 10-14 and 16 are canceled without prejudice or disclaimer. Withdrawal of the rejection of claims 1-7 and 10-17 under §102 is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Carl R. Wesolowski**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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